

REMARKS

Information Disclosure Statement Filed Herewith

Applicants respectfully bring to the attention of the Examiner the Information Disclosure Statement filed herewith.

Initialed Form PTO-1449 Not Provided to Applicants

Applicants submitted a Supplemental Information Disclosure Statement and Substitute Form PTO-1449 on October 15, 2004.

The MPEP states:

The examiner must consider all citations submitted in conformance with the rules and this section, and their initials when placed adjacent to the considered citations on the list or in the boxes provides a clear record of which citations have been considered by the Office.... If any of the citations are considered, a copy of the submitted list, form PTO-1449, or PTO/SB/08A and 08B, as reviewed by the examiner, will be returned to the applicant with the next communication. MPEP 609 III C(2)

Applicants respectfully request that a copy of the initialed form be provided to Applicants. The copy can be included with the next communication from the Patent Office regarding the present application, or can be sent to Applicant's attorney via facsimile at the following number: 408-377-6137.

Claim Rejections

Claims 1-5, 9-14, and 16-17

The Office Action does not establish that claims 1-5 and 9-14, 16, 17 are obvious over "Trimberger" (U.S. Patent 5,892,961 to Trimberger) in view of "Erickson (U.S. Patent 6,212,639 to Erickson et al.) under 35 USC §103(a). The rejection is respectfully traversed because Erickson is thought to be disqualified as prior art under 35 USC §103(c). The present application was filed on 11/28/2000, and the present application and Erickson were, at the time the invention of the present application was made, owned by Xilinx, Inc. Therefore, the rejection of claims 1-5 and 9-14, 16, 17 under §103(a) is moot and should be withdrawn.

Furthermore, even if Erickson does qualify as prior art, the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Trimberger with teachings of Erickson.

For example, in regards to claim 1, the alleged motivation is stated without any supporting evidence and is therefore improper. In claim 2, Erickson's use of a key to decrypt data does not suggest that one of the unencrypted words in the bitstream is a key address for locating a decryption key. Others of the limitations in the remaining claims are not shown to be suggested, and the alleged motivations are also improper. Thus, rejection of claims 1-5 and 9-14, 16, 17 over the Trimberger-Erickson combination should be withdrawn.

Claims 6-8

The Office Action does not establish that claims 6-8 are unpatentable under 35 USC §103(a) over Trimberger in view of Erickson, in further in view of "Kwiat" (U.S. Patent 5,931,959 to Kwiat). Claims 6, 7, and 8 depend from claim 1 and are patentable over the Trimberger-Erickson-Kwiat combination for at least the reasons set forth above. In addition, the rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of the Trimberger-Erickson combination with teachings of Kwiat.

In regards to the limitations, Kwiat suggests computing a CRC code. However, there is no apparent suggestion of any order of computing a CRC code relative to encrypting the configuration data as set forth in claims 7 and 8. Further clarification is requested if the rejection is maintained. Otherwise the rejection should be withdrawn.

The alleged motivation states that "it would have been obvious ... to combine a Cyclic redundancy checksum (CRC) as per teaching of Kwiat in to the method of as taught by the combination of Trimberger and Erickson, in order to increase the chance of providing error free configuration of the PLD or FPGA when the design in the form of bitstream is loaded on to the PLD or FPGA." It is respectfully submitted that this alleged motivation has no apparent relation to the order of computing a CRC code

relative to encrypting the configuration data as set forth in claims 7 and 8. Thus, the alleged motivation is improper.

The rejection of claims 6-8 over the Trimberger-Erickson-Kwiat combination should be withdrawn because the Office Action fails to show a suggestion of all the limitations and fails to provide a proper motivation for combining the references.

Claim 15

The Office Action does not establish that claim 15 is unpatentable under 35 USC §103(a) the Trimberger-Erickson combination in further in view of “Yin” (U.S. Patent 6,028,939 to Yin). Claim 15 depends from claim 1 and is patentable over the Trimberger-Erickson-Yin combination for at least the reasons set forth above. In addition, the rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of the Trimberger-Erickson with teachings of Yin.

Claim 15 includes limitations of the plurality of unencrypted words for controlling loading of configuration data include a cipher block chaining initial value. Yin is cited as suggesting these limitations. However, Yin simply teaches general use of cipher block chaining. There is no suggestion of the further limitations of the initial value being in unencrypted words of configuration data. Thus, the Office Action fails to show that the combination suggests the limitations of claim 15.

The alleged motivation is improper because it is unsupported by evidence. The alleged motivation states that “it would have been obvious ... to employ the inclusion of cipher block chaining initial value as per teachings of Yin in to the method of as [sic] taught by the combination of Trimberger and Erickson for the purpose of strengthening the security of the PLD since a single bit error in a ciphertext block affects the decryption of all subsequent blocks.” This alleged motivation contains no evidence of a motivation to include the cipher text block initial value in the unencrypted words for controlling the loading of configuration data. The alleged motivation simply states a general use for ciphertext encryption without providing any evidence to motivate the specific inclusion of the initial value in the unencrypted data.

Therefore, the Office Action fails to establish that claim 15 is unpatentable over the Trimberger-Erickson-Yin combination.

Claims 18-20

The Office Action does not establish that claims 18-20 are unpatentable under 35 USC §103(a) over Erickson in view of Yin. The Erickson reference is thought to be disqualified as prior art under 35 USC §103(c). Thus, claims 18-20 are not shown to be unpatentable over the Erickson-Yin combination.

Furthermore, the rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Erickson with teachings of Yin. No suggestion is shown of forming a cipher block chaining initial value comprising a starting address for loading a design into a PLD. None of the cited teachings in either of the references appear to reference this specific use of the starting address.


The Office Action also fails to provide a proper motivation for combining Yin with Erickson. The alleged motivation states that "it would have been obvious ... to encrypt the control word in chain block mode as per teachings of Yin in to the encryption method as taught by Erickson in order to secure a plurality of models." The alleged motivation fails to provide any evidence that Erickson would need to secure a plurality of models. Furthermore, securing a plurality of models does not in any apparent way motivate forming the initial cipher block chaining value comprising the starting address. Therefore, the alleged motivation is unsupported by evidence and improper.

Claims 19 and 20 depend from claim 18 and are patentable over the Erickson-Yin combination for at least the reasons set forth above. The Office Action does not establish that claims 18-20 are unpatentable over the Erickson-Yin combination, and the rejection should be withdrawn.

CONCLUSION

Reconsideration and a notice of allowance are respectfully requested in view of the Remarks presented above. If the Examiner has any questions or concerns, a telephone call to the undersigned is invited.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patent, Alexandria, VA 22313-1450, on January 14, 2005:

Julie Matthews
Name



Signature